

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number  
**WO 2005/071472 A1**

(51) International Patent Classification<sup>7</sup>: **G02F 1/133**, G09G 3/36, 3/20

(21) International Application Number: PCT/JP2005/001050

(22) International Filing Date: 20 January 2005 (20.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2004-014900 22 January 2004 (22.01.2004) JP

(71) Applicant (for all designated States except US): **SEIKO EPSON CORPORATION [JP/JP]**; 4-1, Nishi-Shinjuku 2-Chome, Shinjuku-Ku, Tokyo 1630811 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NISHIZAWA, Masato** [JP/JP]; c/o SEIKO EPSON CORPORATION, 3-5, Owa 3-Chome, Suwa-Shi, Nagano 3928502 (JP). **HIRAMATSU, Kazunori** [JP/JP]; c/o SEIKO EPSON CORPORATION, 3-5, Owa 3-Chome, Suwa-Shi, Nagano 3928502 (JP). **SAWADA, Munenori** [JP/JP]; c/o SEIKO

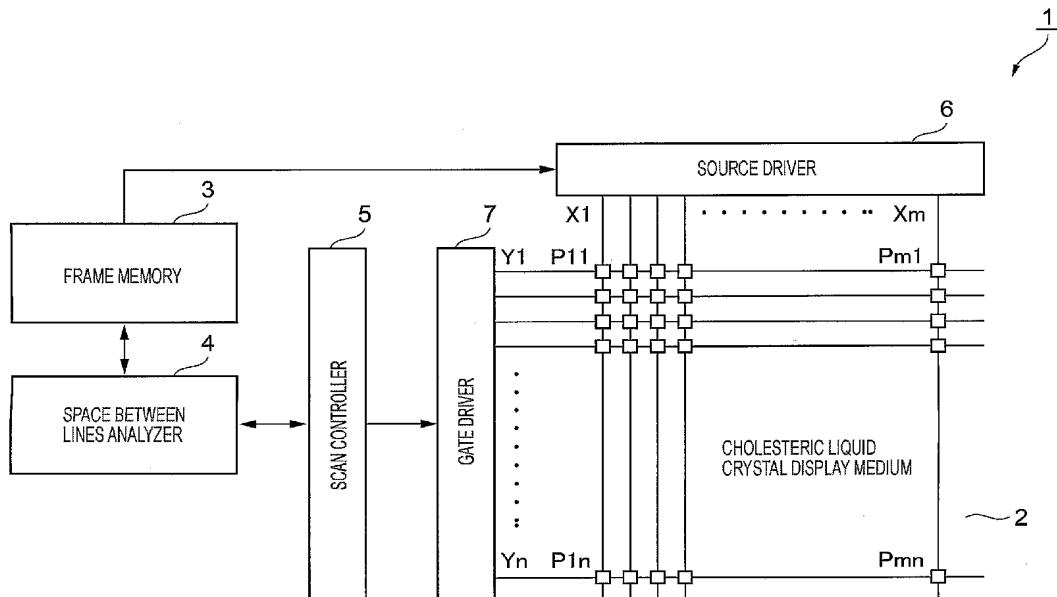
(74) Agents: **KAMIYANAGI, Masataka** et al.; c/o Intellectual Property Division SEIKO EPSON CORPORATION, 3-5, Owa 3-Chome, Suwa-Shi, Nagano 3928502 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: CHOLESTERIC LIQUID CRYSTAL DRIVING DEVICE AND DRIVING METHOD



**WO 2005/071472 A1**

(57) Abstract: ABSTRACT A cholesteric liquid crystal driving device according to the present invention includes a first driving circuit for displaying one part of the image data to be displayed by a cholesteric liquid crystal on a first scanning line by driving the cholesteric liquid crystal on the first scanning line in accordance with first and second cycles; and a second driving circuit for displaying the other part of the image data to be displayed by a cholesteric liquid crystal on a second scanning line by driving the cholesteric liquid crystal on the second scanning line in accordance with a third or fourth cycle.



**Published:**

- with international search report
- with amended claims

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*